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Form PTO- NE TOADS SERIAL NO. 10/038.694 ATTORNEY DOCKET NO .: CONFIRMATION NO. 1998 U.S. DEPARTMENT OF COMMERCE (Rev. 7-80) PATENT AND TRADEMARK OFFICE APPLICANT: Hutchins et al. LIST OF PRIOR ART CITED BY APPLICANT (Use several sheets if necessary) GROUP: 1623 FILING DATE: December 31, 2001 U.S. PATENT DOCUMENTS DOCUMENT NO. DATE NAME CLASS SUBCLASS FILING DATE EXAMINER IF APPROPRIATE INITIAL FOREIGN PATENT DOCUMENTS WO 00/64930 11/02/00 Jay (PCT) Larsen et al. (PCT) WO 98/08949 03/05/98 OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.) Aigner et al. Suppression of cartilage matrix gene expression in upper zone chondrocytes of osteoarthritic А3 cartilage, Arthritis Rheum 40:562-569 (1997) Aydelotte et al. Differences between sub-populations of cultured bovine articular chondrocytes. I. Morphology Α4 and cartilage matrix production. Connect Tissue Res. 18:205-222 (1988) Aydelotte et al. Differences between sub-populations of cultured bovine articular chondrocytes. II. Proteoglycan **A**5 metabolism. Connect Tissue Res. 18:223-234 (1988) Condreay et al. Transient and stable gene expression in mammalian cells transduced with a recombinant baculovirus Α6 vector. PNAS 96:127-132 (1999) de Belder. Preparation and properties of fluorescein-labelled hyaluronate. Carbohydr. Res. 44(2):251-257 (1975) Α7 Flannery et al. Articular cartilage superficial zone protein (SZP) is homologous to megakaryocyte stimulating AR factor precursor and is a multifunctional proteoglycan with potential growth-promoting, cytoprotective, and lubricating properties in cartilage metabolism. Biochem. Biophys. Res. Commun. 254(3):535-541 (1999) Freemont et al. Gene expression of matrix metalloproteinases 1.3, and 9 by chondrocytes in osteoarthritic human Α9 knee articular cartilage is zone and grade specific. Ann Rheum Dis 56:542-549 (1997) Guilak et al. Mechanical and biochemical changes in the superficial zone of articular cartilage in canine A10 experimental osteoarthritis. J Orthop Res 12:474-484 (1994) Hauselmann et al. The superficial layer of human articular cartilage is more susceptible to interleukin-l-induced A11 damage than the deeper layers. Arthritis Rheum 39:478-488 (1996) Hollander et al. Damage to type II collagen in aging and osteoarthritis starts at the articular surface. originates A12 around chondrocytes, and extends into the cartilage with progressive degeneration. J Clin Invest 96:2859-2869 (1995) Jay et al. Lubricin is a product of megakaryocyte stimulating factor gene expression by human synovial fibroblasts. A13 J Rheumatol 27:594-600 (2000) Kilpatrick et al. Rapid development of affinity matured monoclonal antibodies using RIMMS. Hybridoma 16:381-389 A14 (1997) Kilpatrick et al. Gene gun delivered DNA-based immunizations mediate rapid production of murine monoclonal A15 antibodies to the Fit-3 receptor. Hybridoma 17:569-576 (1998) Krejcarek et al. Covalent attachment of chelating groups to macromolecules. Biochem Biophys Res Commun 77:581-585 A16 (1977)

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TECH CENTER 1600/2900 **MADE** Lark et al. Aggrecan degradation in human cartilage. Evidence for both matrix metalloproteinase and aggrecanase activity in normal, osteoarthritic. and rhematoid joints. J Clin Invest 100:93-106 (1997) Lindley et al. Production of monoclonal antibodies using recombinant baculovirus displaying gp64-fusion proteins. A18 J. Immun. Methods 234:123-135 (2000) Lorenzo et al. A novel cartilage protein (CILP) present in the mid-zone of human articular cartilage increases with A19 age. J Biol Chem 273:23463-23468 (1998) Luckow et al. Efficient generation of infectious recombinant baculoviruses by site-specific transposon-mediated A20 insertion of foreign genes into a baculovirus genome propagated in Escherichia coli. J Virol 67:4566-4579 (1993) Marcelino et al. CACP. encoding a secreted proteoglycan. is mutated in camptodactyl-arthropathy-coxa varapericarditis syndrome. Nature Genetics 23:319-322 (1999) Merberg et al. A Comparison of Vitronectin and Megakaryocyte Stimulaing Factor. Biology of Vitronectins and their A22 Receptors pp. 45-52 (1993) Ohta et al. Expression of matrix metalloproteinase 7 (matrilysin) in human osteoarthritic cartilage. Lab Invest A23 78:79-87 (1998) Panula et al. Articular cartilage superficial zone collagen birefringence reduced and cartilage thickness A24 increased before surface fibrillation in experimental osteoarthritis. Ann Rheum Dis 57:237-245 (1998) Schmid et al. Immunohistochemical distribution of a novel proteoglycan in the surface lamina of articular A25 cartilage. Proceedings of the Orthopedic Res. Soc. p. 97-117 (1994) Schumacher et al. Chondrocytes of the superficial zone of bovine articular cartilage synthesize and secrete a A26 novel proteoglycan. Orthopaedic Research Society, poster presentation, 40th Annual Meeting, New Orleans, LA (Feb. 21-24, 1994) Schumacher et al. Macromolecules synthesized by articular chondrocytes of the superficial zone but not the A27 deeper zones are also synthesized by synovium. Orthopaedic Research Society. poster presentation, 41st Annual Meeting. Orlando, Florida, Feb. 13-16.1995. Trans. Orthop. Res. Soc. 20:397 (1995) Schumacher et al. A novel proteoglycan synthesized by superficial-zone chondrocytes of articular cartilage. A28 American College of Rheumatology, platform presentation. Arthr. Rheum. 36:S90 (1993) Schumacher et al. A novel proteoglycan synthesized and secreted by chondrocytes of the superficial zone of A29 articular cartilage. Arch. Biochem. Biophys. 311(1):144-152 (1994) Schumacher et al. Immunolocalization of a novel proteoglycan synthesized by cells lining the synovia cavity. Trans. A30 Orthop, Res. Soc. 23:442 (1998) Schumacher et al. Immunodetection and partial cDNA sequence of the proteoglycan. Superficial Zone Protein. A31 synthesized by cells lining synovia joints. J. Orthop. Res. 17:110-120 (1999) Su et al. Use of a PPAR gamma-specific monoclonal antibody to demonstrate thiazolidinediones induce PPAR gamma A32 receptor expression in vitro. Hybridama 18:273-280 (1999) Su et al. Monoclonal antibodies against human collagenase and stromelysin. Hybridoma 14(4):383-390 (1995) A33 Su et al. Monitoring of PPAR alpha protein expression in human tissue by the use of PPAR alpha-specific Mabs. A34 Hybridoma 17:47-53 (1998) Swann et al. The lubricating activity of synovial fluid glycoproteins. Arthritis and Rheum 24:22-30 (1981) A35 Towle et al. Detection of interleukin-1 in the cartilage of patients with osteoarthritis: a possible A36 autocrine/paracrine role in pathogenesis. Osteoarthritis Cartilage 5:293-300 (1997) Tudor et al. Superficial Zone Proteoglycan Biosynthesis is Stimulated by Growth Factors But Inhibited by IL-1 In A37 Chondrocytes Maintained in Agarose Cultures. 45th Annual Meeting. Orthopaedic Research Society. Anaheim. CA (February-1-1. 1999) 10 DATE CONSIDERED: **EXAMINER:** EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609: Draw line through citation if

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